

Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the application.

Sub B1
1. (currently amended) A method of performing server-side processing of postback input received from a client and associated with a client-side user interface element, the method comprising:

examining the postback input received from the client to determine an identifier of a target server-side control object;

identifying the target server-side control object based on the identifier of the target server-side control object;

passing the postback input received from the client to the target server-side control object; and

processing the postback input received from the client and passed to the target server-side control object.

2. (original) The method of claim 1 wherein the processing operation comprises changing a property of the target server-side control object; and further comprising:

generating authoring language data from the target server-side control object based on the property to define the client-side user interface element for transmission to the client.

3. (original) The method of claim 1 wherein the processing operation comprises raising a server-side event from the target server-side control object; and further comprising:

1 generating authoring language data from the target server-side control
2 object based on the server-side event to define the client-side user interface
3 element for transmission to the client.

4 4. (original) The method of claim 2 further comprising:
5 creating a plurality of server-side control objects in a server-side control
6 object hierarchy, prior to the operation of processing the postback input; and
7 terminating the plurality of server side control objects, after the operation of
8 generating authoring language data.

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10 5. (original) The method of claim 2 further comprising:
11 searching for the target server-side control object in a server-side control
12 hierarchy based on the identifier;
13 creating the target server-side control object in the server-side control
14 hierarchy, if the target server-side control object is not found by the searching
15 operation; and
16 terminating the server-side control hierarchy, after the operation of
17 generating authoring language data.

18 6. (original) The method of claim 1 wherein the identifier has a
19 hierarchical identifier structure indicating a plurality of levels in a server-side
20 control object hierarchy including a plurality of member server-side control
21 objects, and the operation of identifying the target server-side control object
22 comprises:
23 extracting a node level identifier from the identifier;
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1 passing the node level identifier to a member server-side control object
2 corresponding to the node level identifier;

3 identifying the member server-side control object as the target server-side
4 control object, if the node level identifier identifies a leaf node of the identifier;

5 extracting a next node level identifier from the identifier of the target
6 server-side control object, if the node level identifier does not identify a leaf node
7 of the identifier, wherein the next node level identifier identifies a child server-
8 side control object of the member server-side control object; and

9 performing recursively the passing and identifying operations and the
10 operation of extracting a next node level identifier using the next node level
11 identifier as the node level identifier and the child server-side control object as the
12 member server-side control object, if the node level identifier does not identify a
13 leaf node of the identifier.

14 7. (original) The method of claim 1 wherein the operation of
15 processing the postback input comprises:

16 storing a postback data value as a property the target server-side control
17 object.

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19 8. (original) The method of claim 7 wherein the target server-side
20 control object initially stores an old data value as a property, and the operation of
21 storing a postback data value comprises:

22 associating the postback data value with the property;

23 indicating a data change associated with the target server-side control
24 object, if the postback data value passed to the target server-side control object is
25 different than the old data value of target server-side control object; and

1 replacing the old data value with the postback data value in the target
2 server-side control object.

3 9. (original) The method of claim 8 further comprising:
4 raising a server-side data change event after the operation of replacing of
5 the old data value, if a data change is indicated.

6
7 10. (original) The method of claim 7 wherein the target server-side
8 control object is one of a plurality of member server-side control objects in a
9 server-side control object hierarchy, and the operation of storing a postback data
10 value comprises:

11 storing postback data values for all of the member server-side control
12 objects in the server side control object hierarchy; and

13 raising at least one server-side data change event after the operation of
14 storing a postback data value for all member server-side control objects, if at least
15 one data change is indicated.

16 11. (original) The method of claim 10 further comprising:
17 receiving the server-side data change event from the target server-side
18 control object; and

19 invoking a function of a non-user-interface server component, based on the
20 server-side data change event.

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22 12. (original) The method of claim 1 wherein the operation of
23 processing the postback input comprises:

24 processing a postback event using the target server-side control object.
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1 13. (original) The method of claim 12 wherein the operation of
2 processing a postback event comprises:

3 extracting from the postback input a postback event argument associated
4 with the identifier;

5 passing the postback event argument associated with the identifier to the
6 target server-side control object; and

7 processing the postback event argument using the target server-side control
8 object.

9 14. (original) The method of claim 13 wherein the operation of
10 processing a postback input further comprises:

11 raising a server-side event from the target server-side control object,
12 responsive to the operation of processing the postback event argument.

13 15. (original) The method of claim 14 further comprising:

14 receiving the server-side event from the target server-side control object;
15 and

16 invoking a function of a non-user-interface server component, based on the
17 server-side event.

18 16. (currently amended) A computer data signal embodied in a carrier
19 wave by a computing system and encoding a computer program for executing a
20 computer process performing server-side processing of postback input received
21 from a client and associated with a client-side user interface element, the computer
22 process comprising:
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1 examining the postback input received from the client to determine an
2 identifier of a target server-side control object;

3 identifying the target server-side control object based on the identifier of
4 the target server-side control object;

5 passing the postback input received from the client to the target server-side
6 control object; and

7 processing the postback input received from the client and passed to the
8 target server-side control object.

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10 17. (currently amended) A computer program storage medium readable
11 by a computer system and encoding a computer program for executing a computer
12 process performing server-side processing of postback input received from a client
13 and associated with a client-side user interface element, the computer process
14 comprising:

15 examining the postback input received from the client to determine an
16 identifier of a target server-side control object;

17 identifying the target server-side control object based on the identifier of
18 the target server-side control object;

19 passing the postback input received from the client to the target server-side
20 control object; and

21 processing the postback input received from the client and passed to the
22 target server-side control object.

23 18. (original) A computer program product for processing postback
24 input received from a client and associated with a client-side user interface
25 element, the computer process comprising:

1 creating a plurality of server-side control objects in a server-side control
2 object hierarchy, the server-side control object hierarchy including a target server-
3 side control object associated with the client-side user interface element;

4 passing the postback input to the target server-side control object;

5 processing the postback input received by target server-side control object;

6 and

7 generating authoring language data from the plurality of server-side control
8 objects to define a web page for display on a client.

9 19. (original) The computer program product of claim 18 wherein the
10 computer process further comprises:

11 receiving an identifier associated with the target server-side control object;

12 and

13 identifying the target server-side control object within the server-side
14 control object hierarchy, based on the identifier.

15 20. (original) The computer program product of claim 18 wherein the
16 computer process further comprises:

17 terminating the plurality of server side control objects, after the operation of
18 generating authoring language data.

19 Please add the following new claims 21-37:
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22 21. (new) A method comprising:

23 examining input data received from a client to identify a corresponding
24 target server-side control object, the input data being associated with a client-side

25 user interface element; and

1 passing the input data to the identified target server-side control object to
2 process the input data.

3 22. (new) A computer program product embodied on a computer
4 program storage medium readable by a computer system for executing a computer
5 process, the computer process comprising:

6 examining input data received from a client to identify a corresponding
7 target server-side control object, the input data being associated with a client-side
8 user interface element; and

9 passing the input data to the identified target server-side control object to
10 process the input data.

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12 23. (new) A computer system comprising:

13 a plurality of server-side control objects in a server-side control object
14 hierarchy on a server, the server-side control object hierarchy including a target
15 server-side control object associated with a client-side user interface element on a
16 client, such that input data received by the server from the client-side user
17 interface element is passed within the server to the target server-side control object
18 in the server-side control object hierarchy; the plurality of server-side control
19 objects generating authoring language data to define a web page for display on the
20 client.

21 24. (new) A computer program product embodied in a computer
22 readable medium for executing a computer process, the computer process
23 comprising:
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1 generating authoring language data from a plurality of server-side control
2 objects at a server to define a page for display on a client, the authoring language
3 data including a script that is tagged to be executed by the server to process input
4 data received from the client.

5 25. (new) The computer program product of claim 24, wherein each
6 server-side control object corresponds to a client-side user interface element.

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8 26. (new) A method comprising:

9 generating authoring language data from a plurality of server-side control
10 objects at a server to define a web page for display on a client, the authoring
11 language data including a script that is tagged to be executed by the server to
12 process input data received from the client.

13 27. (new) A method comprising:

14 receiving input data from the client at the server, the input data being
15 associated with an individual client-side user interface element on the client;

16 generating a hierarchy of server-side control objects on a server, each
17 server-side control object corresponding to a client-side user interface element on
18 a client;

19 identifying a server-side control object in the hierarchy to which the
20 individual client-side user interface element corresponds; and

21 processing the input data using the identified server-side control object.

22
23 28. (new) The method of claim 27 wherein the processing operation
24 comprises:

1 setting a property value of the identified server-side control object based on
2 the input data.

3 29. (new) The method of claim 27 wherein the processing operation
4 comprises:

5 raising an event in the identified server-side control object based on the
6 input data.

7
8 30. (new) The method of claim 27 further comprising:

9 generating authoring language data from a plurality of server-side control
10 objects at a server to define a page for display on the client, the page including the
11 individual client-side user interface element.

12 31. (new) The method of claim 27 further comprising:

13 generating authoring language data from a plurality of server-side control
14 objects at a server to define a page for display on the client, the authoring language
15 data including a script that is tagged to be executed by the server to process input
16 data received from the client.

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18 32. (new) A computer program product embodied in a computer
19 readable medium for executing a computer process, the computer process
20 comprising:

21 receiving input data from the client at the server, the input data being
22 associated with an individual client-side user interface element on the client;

23 generating a hierarchy of server-side control objects on a server, each
24 server-side control object corresponding to a client-side user interface element on
25 a client;

1 identifying a server-side control object in the hierarchy to which the
2 individual client-side user interface element corresponds; and

3 processing the input data using the identified server-side control object.

4
5 33. (new) The computer program product of claim 32 wherein the
6 processing operation comprises:

7 setting a property value of the identified server-side control object based on
8 the input data.

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10 34. (new) The computer program product of claim 32 wherein the
11 processing operation comprises:

12 raising an event in the identified server-side control object based on the
13 input data.

14
15 35. (new) The computer program product of claim 32 wherein the
16 computer process further comprises:

17 generating authoring language data from a plurality of server-side control
18 objects at a server to define a page for display on the client, the page including the
19 individual client-side user interface element.

20
21 36. (new) The computer program product of claim 32 wherein the
22 computer process further comprises:

23 generating authoring language data from a plurality of server-side control
24 objects at a server to define a page for display on the client, the authoring language
25 data including a script that is tagged to be executed by the server to process input
data received from the client.

1 37. (new) A method comprising:

2 creating a plurality of server-side control objects in a server-side control
3 object hierarchy, the server-side control object hierarchy including a target server-
4 side control object associated with the client-side user interface element;

5 passing the input data to the target server-side control object;

6 processing the input data received by target server-side control object; and

7 generating authoring language data from the plurality of server-side control
8 objects to define a web page for display on a client.

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